

REMARKS

Claims 1-4, 7, 9-15, and 18-31 are pending in the present application. It is noted that the office action summary omitted a number of claims from the pending claims that were treated substantively and remain pending. Claims 21-30 are withdrawn from consideration, and claims 1-4, 7, 9-15, 18-20 and 31 have been examined. Applicants appreciate the examiner's indication that claim 15 would be allowable if rewritten in independent form. Claims 1-4, 7, 9-14 and 18-20 stand rejected. Applicants address the present action as follows. The following issues and the above amendments specifically address only issues raised in the final office action. Entry and consideration is appropriate to place the case in condition for allowance.

Claim 19 stands rejected under 35 U.S.C. § 112, first paragraph as being not supported and under second paragraph, as being indefinite. The Examiner states that support was not found for the claim amendment. The Examiner's attention is directed to page 12, lines 3-5, for example. It is stated that "[i]n the case of INTER coding, a switch 28 adds prediction that is obtained with motion compensation from a motion compensator 30. The switch 28 is left open in the case of INTRA coding. The motion compensator 30 performs motion estimation on the current frame, *using as predictions, a stored short term frame from a short term frame memory 32 and a stored long-term frame from a long-term frame memory 34.*"

A minor amendment was also made to correct an antecedent recitation, but this did not merit a 112, second paragraph rejection because the Examiner clearly understood what was referenced, as would have an artisan.

Claim 15 was indicated to be allowable. The indication of allowable subject matter is appreciated. Claim 15 has been re-written in independent form.

Claims 1, 4, 7, 11, and 19-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukuhara et al. ("Very Low Bit-Rate Video Coding with Block Partitioning and Adaptive Selection of Two Time-Differential Frame Memories").

Applicants traverse this rejection. The previous arguments are maintained, but will not be repeated. The Examiner's specific "response to arguments" will be addressed.

The amendments to claim 1 are limited to features that were in a Markush group in claim 7, but are narrowed now in claim 1 to address a specific issue raised in the final office action. There are no new issues raised, instead, the Examiner's interpretation from the final office action is addressed by the amendments. Entry is appropriate to place the case in condition for allowance.

There seems to be general agreement about Fukuhara, as the Examiner states on page 11 that "it is clear to the examiner that Fukuhara discloses to select between long and short term memory based upon error." However, in the response to arguments the Examiner asserts that claim 1 does not define the factors being examined at encoding. In a related discussion of claim 7, which does disclose factors being examined at encoding, the Examiner compares a dual memory operation in Fukuhara as corresponding to "a history of the changing image region quality" in claim 7. The analysis is not conceded, but claim 1 is amended to expedite prosecution and emphasize preferred factors in claim 7 that concern expected distortion at the decoder. As is made clear in the present application, this concerns anticipation at the encoder. There is no such anticipation suggested by Fukuhara (whether or not combined with the APA) of the claim 1 encoder that determines expected distortion based upon one of based upon one or more of a channel error probability, a history of changing data channel quality, a prediction of changing channel quality, and a history of past coding modes.

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukuhara in view of Applicants' Admitted Prior Art (hereinafter, "AAPA"). In addition to previous arguments, it is noted that the substance of claim 3 was not the same as claim 2, and the anticipation feature of claim 3 has not been addressed. For these reasons, withdrawal of the rejection of claims 2 and 3 is requested.

As has been discussed, Fukuhara only discloses a prediction mode that yields a lowest absolute error is selected as a motion compensation mode (see Fukuhara, Fig. 8, step 3). Claim 3 recites that the coder for encoding selectively chooses the at least

one long term reference block when a connection used by the video encoder is anticipated to be changing to a lower quality. There is no such anticipation in Fukuhara.

Claims 9, 14, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukuhara and Gu et al. (U.S. Patent No. 7,253,831). Claims 9, 14, and 18 ultimately depend from claim 1, and thus incorporate the features of claim 1, plus additional features. Accordingly, applicants traverse the rejection of dependent claims 9, 14, and 18 for the reasons discussed above with respect to the rejection of claim 1, and because Gu fails to remedy the above-identified deficiencies of the rejection. For this reason, applicants request withdrawal of the rejection of claims 9, 14, and 18.

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukuhara in view of Liu et al. (U.S. Patent No. 5,398,079). Claim 12 ultimately depends from independent claim 1. Accordingly, claim 12 includes all the features recited in independent claim 1. Applicants traverse the rejection of claim 12 for the reasons discussed above regarding the rejection of claim 1, and because the Liu fails to remedy the deficiencies identified regarding the rejection of claim 1. For at least this reason, withdrawal of the rejection of claim 12 is requested.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukuhara in view of Liu and Zhang et al. (“Video Coding with Optimal Inter/Intra-Mode Switching for Packet Loss Resilience”). Claim 13 ultimately depends from claim 1, and thus incorporates the features of claim 1, plus additional features. Accordingly, applicants traverse the rejection of dependent claim 13 for the reasons discussed above with respect to the rejection of claim 1, and because Liu and Zhang, separately or when combined with Fukuhara, fail to remedy the above-identified deficiencies of the rejection of claim 1. For this reason, applicants request withdrawal of the rejection of claim 13.

For all the foregoing reasons, applicants submit that this application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney is an interview would expedite prosecution.

Respectfully submitted,

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